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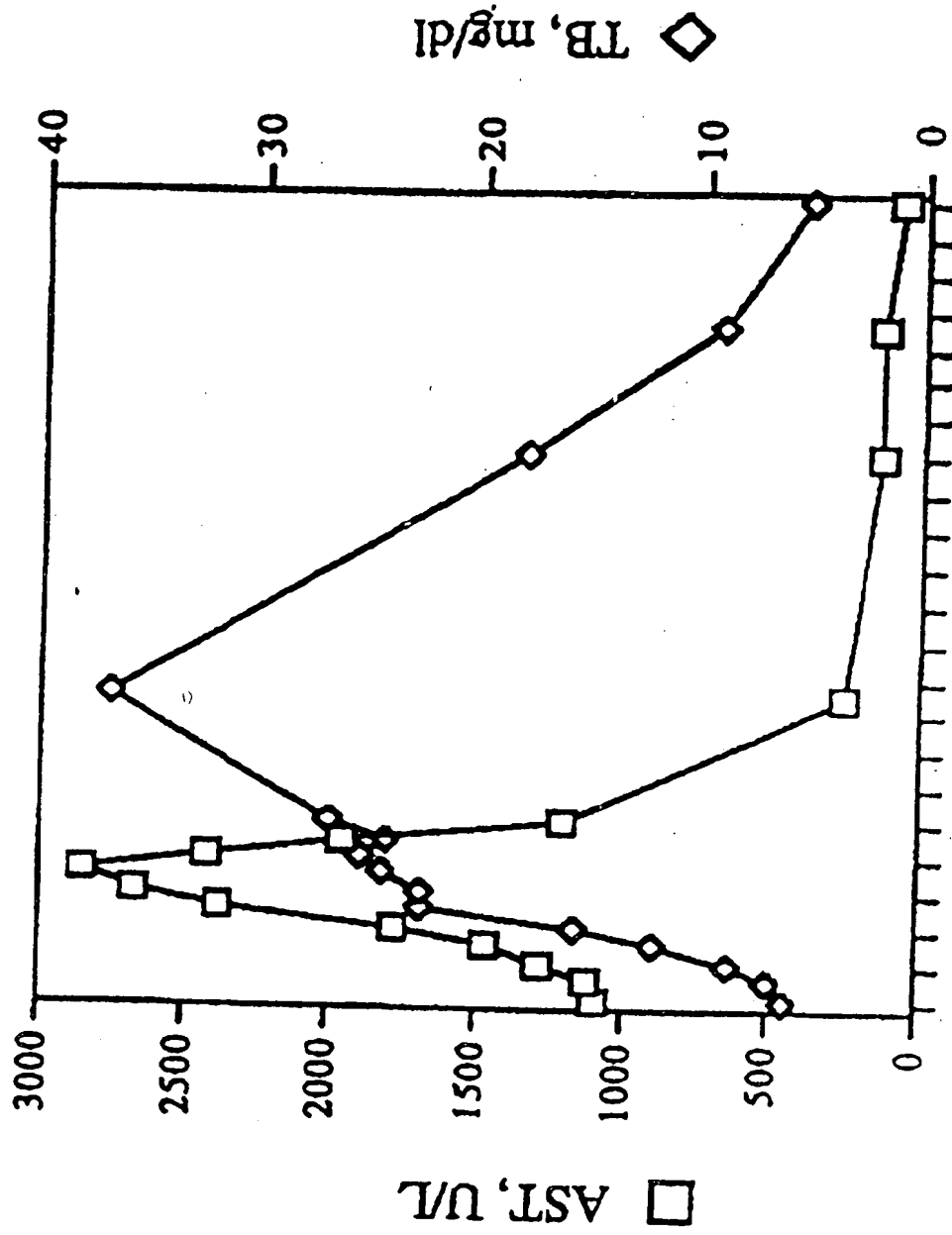


Figure 2

HEV US-1 Genome Extension

# HEV US-1 Genome Extension

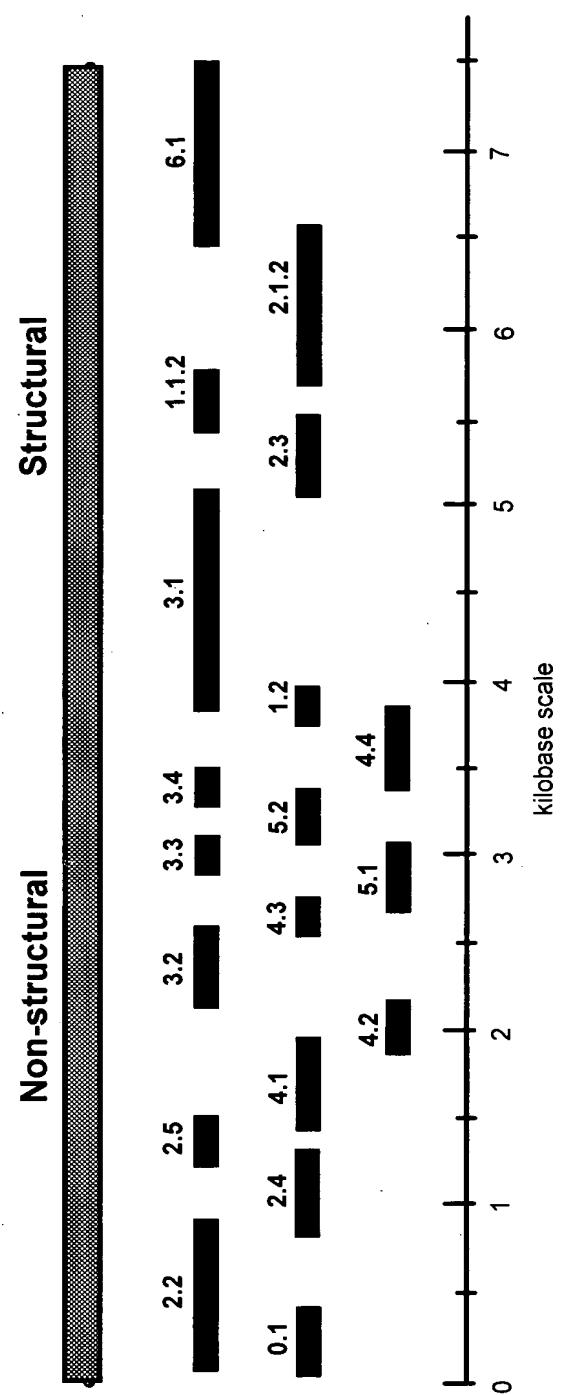


Figure 3

# Extension of HEV US-2

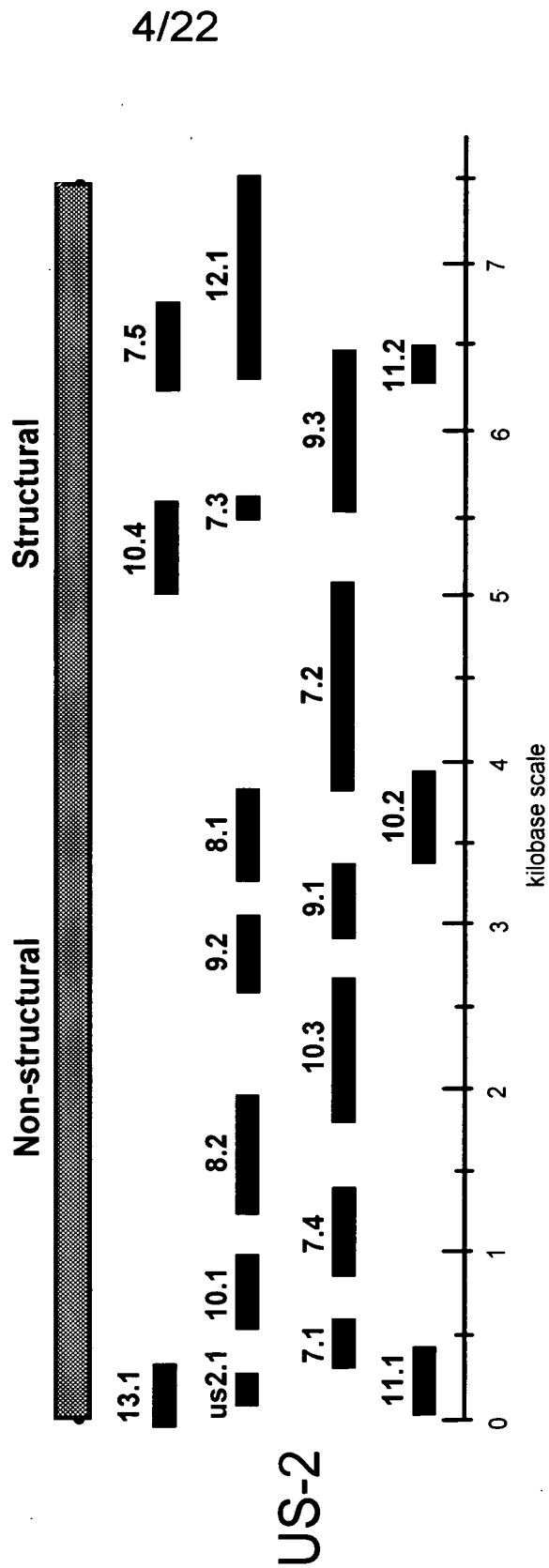


Figure 4

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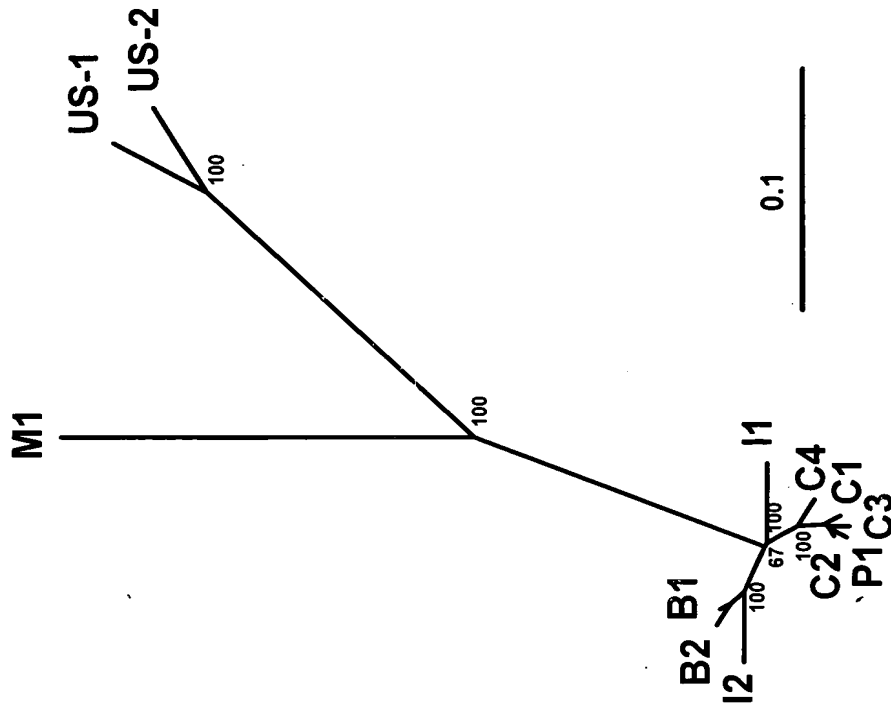
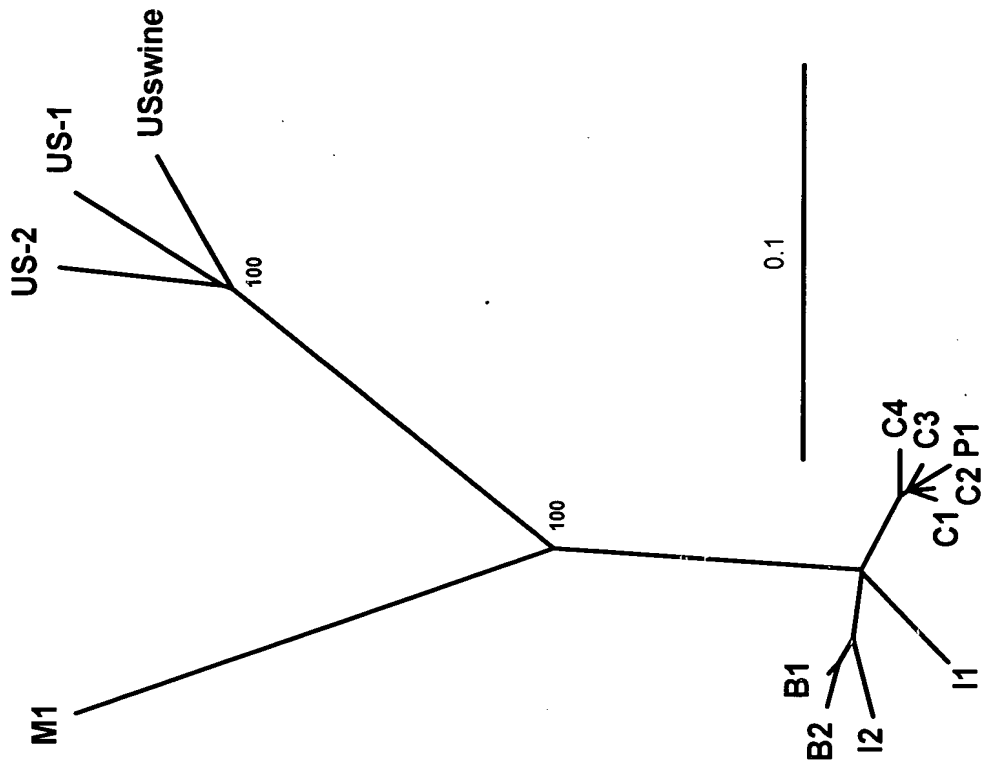


Figure 5

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0.1

Figure 6

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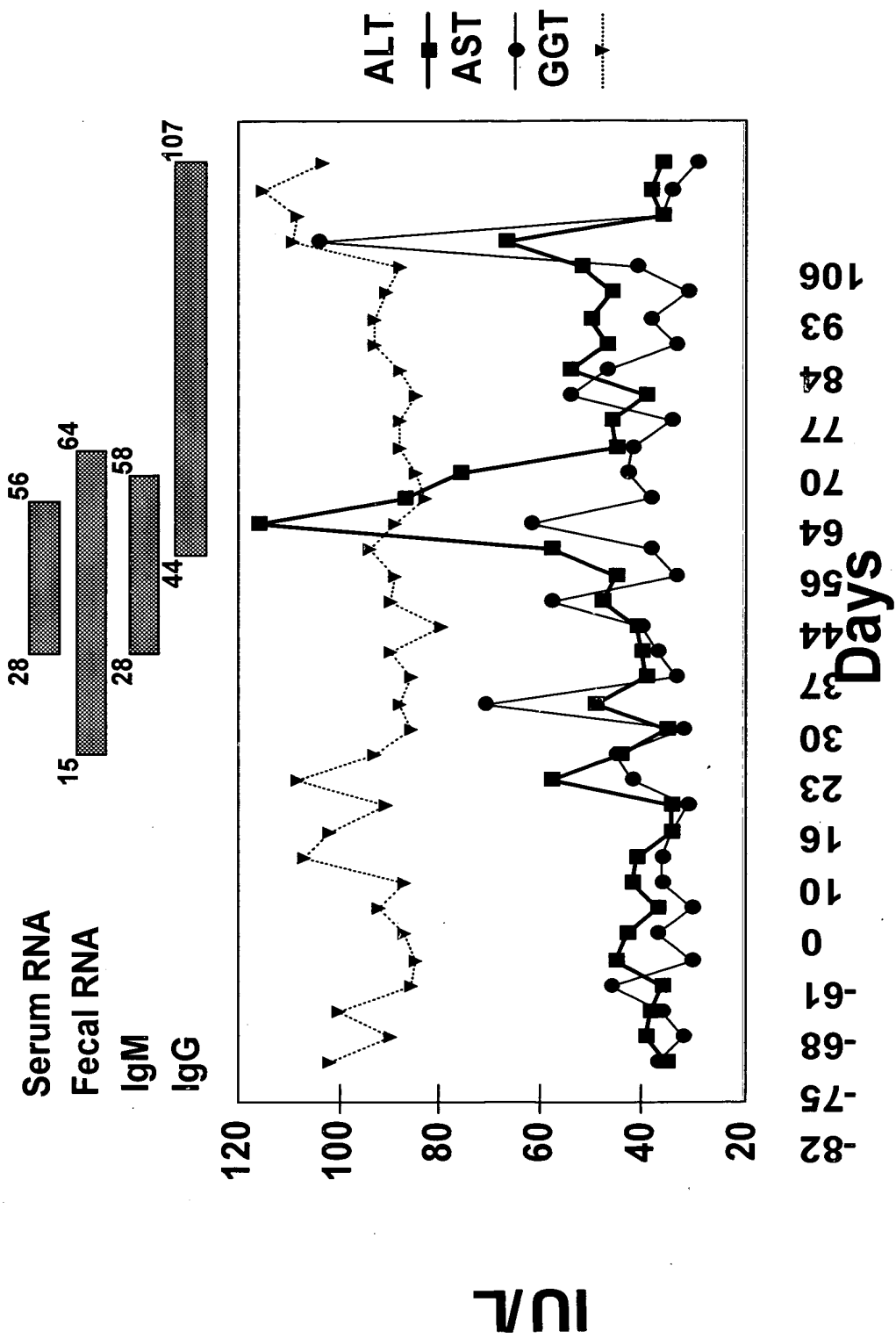


Figure 7

# Extension of Z12

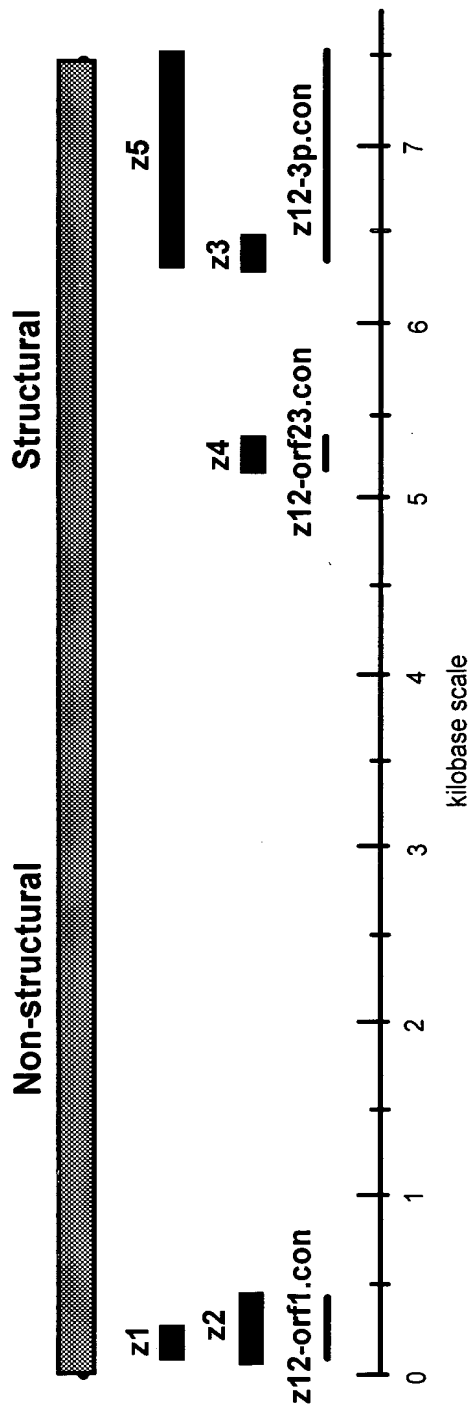


Figure 8



FIGURE 9A

```

51      5p.pile{hpesvp}      100
      GGCTCCTGGC ATCACTACTG CTATTGAGCA GGCTGCTCTA GCAGCGGCCA
      5p.pile{hpeuigh}
      GGCTCCTGGC ATCACTACTG CTATTGAGCA GGCTGCTCTA GCAGCGGCCA
      5p.pile{hpea}
      GGCTCCTGGC ATCACTACTG CTATTGAGCA GGCTGCTCTA GCAGCGGCCA
      5p.pile{840455p}
      ~~~CCTGGC ATTACTACTG CCATTGAGCA GGCTGCTCTG GCTGCGGCCA
      5p.pile{hpenssp}
      GGCTCCTGGC ATCACTACTG CTATTGAGCA AGCAGCTCTA GCAGCGGCCA
      Consensus
      ---CCTGGC AT-CTACTG C-ATTGAGCA -GC-GCTCT- GC-GCGGCCA

101     5p.pile{hpesvp}      150
      ACTCTGCCCT GCGGAATGCT GTGGTAGTTA GGCCTTTTCT CTCTCACCAG
      5p.pile{hpeuigh}
      ATTCTGCCCT TCGGAATGCT GTGGTAGTTA GGCCTTTTCT CTCTCACCAG
      5p.pile{hpea}
      ACTCTGCCCT TCGGAATGCT GTGGTAGTTA GGCCTTTTCT CTCTCACCAG
      5p.pile{840455p}
      ATTCTGCCCT GCGGAATGCT GTGGTGGTTC GGCCTTTTCT ATCTCGCGTG
      5p.pile{hpenssp}
      ACTCCGCCCT TCGGAATGCT GTGGTGGTCC GGCCTTTTCT TTCCCACATCAG
      Consensus
      A-TC-GCC-T -GCGAATGCT GTGGT-GT-- GGCC-TT--T -TC-C----G

151     5p.pile{hpesvp}      200
      CAGATTGAGA TCCTCATTAA CCTAATGCAA CCTCGCCAGC TTGTTTTCCG
      5p.pile{hpeuigh}
      CAGATTGAGA TCCTTATTAA CCTAATGCAA CCTCGCCAGC TTGTTTTCCG
      5p.pile{hpea}
      CAGATTGAGA TCCTTATTAA CCTAATGCAA CCTCGCCAGC TTGTTTTCCG
      5p.pile{840455p}
      CAAACCGAGA TTCTTATTAA TTGATGCAA CCCCGGCAGT TGGTTTTCCG
      5p.pile{hpenssp}
      CAGGTTGAGA TCCTTATAAA TCTCATGCAA CCTCGGCAGC TGGTGTTCG
      Consensus
      CA----GAGA T-CT-AT-AA --T-ATGCAA CC-CG-CAG- T-GT-TT-CG

```

FIGURE 9B

|                  |     |             |             |            |             |            |     |
|------------------|-----|-------------|-------------|------------|-------------|------------|-----|
| 5p.pile{hpesvp}  | 201 | CCCCGAGGTT  | TTCTGGAATC  | ATCCCATCCA | GGTGTTCATC  | CATAACGAGC | 250 |
| 5p.pile{hpeuigh} |     | CCCCGAGGTT  | TTCTGGAACC  | ACCCCATCCA | GGTGTTCATC  | CATAATGAGC |     |
| 5p.pile{hpea}    |     | CCCCGAGGTT  | TTCTGGAACC  | ATCCCATCCA | GGTGTTCATC  | CATAATGAGC |     |
| 5p.pile{840455p} |     | CCCTGAGGTA  | CTTTGGAATC  | ACCCTATCCA | GGGGTTTATA  | CATAATGAAT |     |
| 5p.pile{hpenssp} |     | TCCTGAGGTT  | TTTGTGGAATC | ACCCGATTCA | ACGTGTTATA  | CATAATGAGC |     |
| Consensus        |     | -CC-GAGGT-  | -T-TGGAA-C  | A-CC-AT-CA | -CG-GT-AT-  | CATAA-GA-- |     |
| 5p.pile{hpesvp}  | 251 | TGGAGCTTTA  | CTGCCGCGCC  | CGCTCCGGCC | GCTGTCTTGA  | AATTGGCGCC | 300 |
| 5p.pile{hpeuigh} |     | TGGAGCTTTA  | CTGTCCGCGC  | CGCTCCGGCC | GCTGCCCTTGA | AATTGGTGCC |     |
| 5p.pile{hpea}    |     | TGGAGCTTTA  | CTGTCCGCGC  | CGCTCCGGCC | GCTGCCCTCGA | AATTGGTGCC |     |
| 5p.pile{840455p} |     | TGAACAGTA   | CTGCCGGGCT  | CGGGCTGGTC | GTTGCTTGA   | GTTGGAGCT  |     |
| 5p.pile{hpenssp} |     | TTGAGCAGTA  | TTGCCGTGCT  | CGCTCGGGTC | GCTGCCCTTGA | GATTGGAGCC |     |
| Consensus        |     | T-GA-C--TA  | -TG-CG-GC-  | CG--C-GG-C | G-TG--T-GA  | --TTGG-GC- |     |
| 5p.pile{hpesvp}  | 301 | CATCCCCGCT  | CAATAAATGA  | TAATCCTAAT | GTGGTCCACC  | GCTGCTTCCT | 350 |
| 5p.pile{hpeuigh} |     | CACCCCTCGCT | CAATAAACGA  | CAATCCTAAT | GTGGTCCACC  | GCTGCTTCCT |     |
| 5p.pile{hpea}    |     | CACCCCTCGCT | CAATAAATGA  | CAATCCTAAT | GTGGTCCACC  | GTTGCTTCCT |     |
| 5p.pile{840455p} |     | CACCCAAGAT  | CCATTAAATGA | CAACCCCAAC | GTTCTGCATC  | GTTGTTTCCT |     |
| 5p.pile{hpenssp} |     | CACCCACGCT  | CCATTAAATGA | TAATCCTAAT | GTCTCTCCATC | GCTGCTTTCT |     |
| Consensus        |     | CA-CC--G-T  | C-AT-AA-GA  | -AA-CC-AA- | GT--T-CA-C  | G-TG-TT-CT |     |

FIGURE 9C

|                  |     |             |             |            |             |     |             |
|------------------|-----|-------------|-------------|------------|-------------|-----|-------------|
| 5p.pile{hpesvp}  | 351 | CCGCCCTGTT  | GGCGTGATG   | TTCAGCGCTG | GTATACTGCT  | 400 | CCCACTCGCG  |
| 5p.pile{hpeuigh} |     | CCGCCCTGCC  | GGCGTGATG   | TTCAGCGTTG | GTATACTGCT  |     | CCTACCCGCG  |
| 5p.pile{hpea}    |     | CCGTCCTGCC  | GGCGTGATG   | TTCAGCGTTG | GTATACTGCC  |     | CCTACCCGCG  |
| 5p.pile{840455p} |     | TAGACCGGTT  | GGCCGAGATG  | TTCAGCGCTG | GTACTCTGCC  |     | CCCACTCGCG  |
| 5p.pile{hpenssp} |     | CCACCCCGTC  | GGCCGGGATG  | TTCAGCGCTG | GTACACAGCC  |     | CCGACTAGGG  |
| Consensus        |     | -----CC-G-- | GG-CG-GATG  | TTCAGCG-TG | GTA--C-GC-  |     | CC-AC--G-G  |
| 5p.pile{hpesvp}  | 401 | GGCCGGCTGC  | TAAATTGCCGG | CGTTCCGCGC | TGCGCGGGCT  | 450 | TCCCCGTGCT  |
| 5p.pile{hpeuigh} |     | GGCCGGCTGC  | TAAATTGCCGG | GGTTCCGCAC | TGCGCGGGCT  |     | CCCCGTGCT   |
| 5p.pile{hpea}    |     | GGCCGGCTGC  | TAAATTGCCGG | CGTTCCGCGC | TGCGCGGGCT  |     | CCCCGTGCT   |
| 5p.pile{840455p} |     | GCCCTGcGGC  | TAAATTGCCGC | cGcTcGCGT  | TGCGTGGTCT  |     | CCCCCCCGCT  |
| 5p.pile{hpenssp} |     | GACCTGCGGC  | GAACTGTCCG  | CGCTCGGCAC | TTCGTGGTCT  |     | GCCACCAAGCC |
| Consensus        |     | G-CC-GC-GC  | -AA-TG-CG-  | -G-TC-GC-- | T-CG-GG-CT  |     | -CC--C-GC-  |
| 5p.pile{hpesvp}  | 451 | GACCGCACTT  | ACTGCCTCGA  | CGGGTTTTCT | GGCTGTAACCT | 500 | TTCCCGCCGA  |
| 5p.pile{hpeuigh} |     | GACCGCACTT  | ACTGCTTCGA  | CGGGTTTTCT | GGCTGTAACCT |     | TTCCCGCCGA  |
| 5p.pile{hpea}    |     | GACCGCACTT  | ACTGCTTCGA  | CGGGTTTTCT | GGCTGTAACCT |     | TTCCCGCCGA  |
| 5p.pile{840455p} |     | GACCGCACTT  | ACTGCTTTGA  | TGGATTCTCC | CGTTGTGCTT  |     | TTGTGTCAGA  |
| 5p.pile{hpenssp} |     | GACCGCACTT  | ACTGTTTTGA  | TGGCTTTGCC | GGCTGCCGTT  |     | TTGCCGCCGA  |
| Consensus        |     | GACCGCACTT  | ACTG--T-GA  | -GG-TT--C- | -G-TG-----T |     | TT-C-GC-GA  |

FIGURE 9D

```

1451      3p.pile{hpea}      TGAAGCCAGT GCTTGACCTG ACAAATTCAA TTCTGTGTCG      1500
      3p.pile{hpeuigh}    TGAAGCCAGT GCTCGACTTG ACAAATTCAA TCCTGTGTCG
      3p.pile{hpesvp}     TAAAACCAGT GCTCGACTTG ACAAATTCAA TCTTGTGTCG
      3p.pile{hpenssp}    TTAAGCCCTAT ACTTGACCTT ACACACTCAA TTATGCACCG
      3p.pile{840453p}    TTAAACCTGT ACTTGATCTC ACAAATTCCA TCATACAGCG
      Consensus          T-AA-CC--T -CT-GA--T- ACA-A-TC-A T--T
      GAG-C--T-

1501      3p.pile{hpea}      ATAACATGTC TTTTGCTGCG CCCATGGGTT CGCGACCATG      1550
      3p.pile{hpeuigh}    ATAACATGTC TTTTGCTGCG CCCATGGGTT GCGGACCATG
      3p.pile{hpesvp}     ATAACATGTC TTTTGCTGCG CCCATGGGTT CGCGACCATG
      3p.pile{hpenssp}    ATAACATGTC GTTTGCTGCG CCCATGGGTT CGCCACCATG
      3p.pile{840453p}    ATAACATGTC TTTTGCTGCG CCCATGGGTT C...ACCATG
      Consensus          G---GAATGA ATAACAIGT -TTTGC--CG CCCATGGG-T ----ACCATG
      G---GAATGA ATAACAIGT -TTTGC--CG CCCATGGG-T ----ACCATG

1551      3p.pile{hpea}      CTATTTTGCT GTTGCTCCTC ATGTTTCTGC CTATGCTGCC      1600
      3p.pile{hpeuigh}    CTATTTTGCT GTTGCTCCTC ATGTTTCTGC CTATGCTGCC
      3p.pile{hpesvp}     CTATTTTGCT GTTGCTCCTC ATGTTTCTGC CTATGCTGCC
      3p.pile{hpenssp}    CTCCTTTTGCT GTTGTTCCCTC TTGTTTCTGC CTATGTTGCC
      3p.pile{840453p}    CTGTTCTGTT GTTGTTCCCTC ATGTTTCTGC CTATGCTGCC
      Consensus          CT-TT-TG-T G-TG-TCCCTC -TGTTT-TGC CTAT--TGCC

```

FIGURE 9E

|                  |      |                   |                   |                   |                             |                   |      |
|------------------|------|-------------------|-------------------|-------------------|-----------------------------|-------------------|------|
| 3p.pile{hpea}    | 1601 | CGCGCCACCG        | CCCGGTCAGC        | CGTCTGGCCG        | CCGTCGTGGG                  | CGGCGCAGCG        | 1650 |
| 3p.pile{hpeuigh} |      | CGCGCCACCG        | CCCGGTCAGC        | CGTCTGGCCG        | CCGTCGTGGG                  | CGGCGCAGCG        |      |
| 3p.pile{hpesvp}  |      | CGCGCCACCG        | CCCGGTCAGC        | CGTCTGGCCG        | CCGTCGTGGG                  | CGGCGCAGCG        |      |
| 3p.pile{hpenssp} |      | CGCGCCACCG        | ACCGGTCAGC        | CGTCTGGCCG        | CCGTCGTGGG                  | CGGCGCAGCG        |      |
| 3p.pile{840453p} |      | CGCGCCACCG        | GCCGGTCAGC        | CGTCTGGCCG        | TCGCCCGTGGG                 | CGGCGCAGCG        |      |
| Consensus        |      | CGCGCCACCG        | -CCGGTCAGC        | CGTCTGGCCG        | -CG-CGTGGG                  | CGGCGCAGCG        |      |
| 3p.pile{hpea}    | 1651 | GCGGTTCCCG        | CGGTGGTTTC        | TGGGTGACC         | GGTTGATTC                   | TCAGCCCTTC        | 1700 |
| 3p.pile{hpeuigh} |      | GCGGTTCCCG        | CGGTGGTTTC        | TGGGTGACC         | GGTTGATTC                   | TCAGCCCTTC        |      |
| 3p.pile{hpesvp}  |      | GCGGTTCCCG        | CGGTGGTTTC        | TGGGTGACC         | GGTTGATTC                   | TCAGCCCTTC        |      |
| 3p.pile{hpenssp} |      | GCGGTACCGG        | CGGTGGTTTC        | TGGGTGACC         | GGTTGATTC                   | TCAGCCCTTC        |      |
| 3p.pile{840453p} |      | GCGGTGCCCG        | CGGTGGTTTC        | TGGAGTGACA        | GGTTGATTC                   | TCAGCCCTTC        |      |
| Consensus        |      | GCGGT-CCGG        | CGGTGGTTTC        | TGG-GTGAC-        | <b>GGTTGATTC-TCAGCCCTTC</b> |                   |      |
| 3p.pile{hpea}    | 1701 | GCAATCCCCT        | ATATTCATCC        | AACCAACCCC        | TTCGCCCCCG                  | ATGTCACCGC        | 1750 |
| 3p.pile{hpeuigh} |      | GCAATCCCCT        | ATATTCATCC        | AACCAACCCC        | TTCGCCCCCG                  | ATGTCACCGC        |      |
| 3p.pile{hpesvp}  |      | GCAATCCCCT        | ATATTCATCC        | AACCAACCCC        | TTCGCCCCCG                  | ATGTCACCGC        |      |
| 3p.pile{hpenssp} |      | GCAATCCCCT        | ATATTCATCC        | AACCAACCCC        | TTTGCCCCCAG                 | ACGTTGCCCG        |      |
| 3p.pile{840453p} |      | GCCCTCCCCT        | ATATTCATCC        | AACCAACCCC        | TTCGCCCCCG                  | ATGTCGTTTC        |      |
| Consensus        |      | <b>GC--TCCCCT</b> | <b>ATATTCATCC</b> | <b>AACCAACCCC</b> | <b>TT-GCC-C-G</b>           | <b>A-GT-----C</b> |      |

FIGURE 9F

|                  |      |             |            |            |             |      |             |
|------------------|------|-------------|------------|------------|-------------|------|-------------|
| 3p.pile{hpea}    | 2651 | AGCGCTTACC  | CTGTTTAACC | TTGCTGACAC | CCTGCTTGGC  | 2700 | GGTCTACCGA  |
| 3p.pile{hpeuigh} |      | AGCGCTTACC  | CTGTTTAACC | TTGCTGACAC | CCTGCTTGGC  |      | GGTCTACCGA  |
| 3p.pile{hpesvp}  |      | AGCCCTCACC  | CTGTTCAACC | TTGCTGACAC | TCTGCTTGGC  |      | GGCCTGCCGA  |
| 3p.pile{hpenssp} |      | AGCTCTAACA  | TACTTTAACC | TTGCTGACAC | GCTCCTCGGC  |      | GGGCTCCCCGA |
| 3p.pile{840453p} |      | TGCCCTGACT  | CTGTTTAATC | TTGCTGATaC | GCTTCTTGGT  |      | GGTTTACCGA  |
| Consensus        |      | -GC-CT-AC-  | -T--T-AA-C | TTGCTGA-AC | -CT-CT-GG-  |      | GG--T-CCGA  |
| 3p.pile{hpea}    | 2701 | CAGAAATTGAT | TTCGTCGGCT | GGTGGCCAGC | TGTTCTACTC  | 2750 | TCGCCCCCGTC |
| 3p.pile{hpeuigh} |      | CAGAAATTGAT | TTCGTCGGCT | GGTGGCCAGC | TGTTCTACTC  |      | TCGCCCCCGTC |
| 3p.pile{hpesvp}  |      | CAGAAATTGAT | TTCGTCGGCT | GGTGGCCAGC | TGTTCTACTC  |      | CCGTCCCCGTT |
| 3p.pile{hpenssp} |      | CAGAAATTAAT | TTCGTCGGCT | GGCGGGCAAC | TGTTTTATTTC |      | CCGCCCGGTT  |
| 3p.pile{840453p} |      | CAGAAATTGAT | TTCGTCGGCT | GGGGGTCAAC | TGTTTTACTC  |      | CCGCCCTGTT  |
| Consensus        |      | CAGAAATT-AT | TTCGTCGGCT | GG-GG-CA-C | TGTT-TA-TC  |      | -CG-CC-CT-  |
| 3p.pile{hpea}    | 2751 | GTCTCAGCCA  | ATGGCGAGCC | GACTGTTAAG | CTGTATACAT  | 2800 | CTGTGGAGAA  |
| 3p.pile{hpeuigh} |      | GTCTCAGCCA  | ATGGCGAGCC | GACTGTTAAG | CTGTATACAT  |      | CTGTAGAGAA  |
| 3p.pile{hpesvp}  |      | GTCTCAGCCA  | ATGGCGAGCC | GACTGTTAAG | TTGTATACAT  |      | CTGTAGAGAA  |
| 3p.pile{hpenssp} |      | GTCTCAGCCA  | ATGGCGAGCC | AACCGTGAAG | CTCTATACAT  |      | CAGTGGAGAA  |
| 3p.pile{840453p} |      | GTCTCgGCCA  | ATGGCGAgCC | AACAGTAaAG | TTATACACAT  |      | CTGTtGAgAA  |
| Consensus        |      | GTCTC=GCCCA | ATGGCGAGCC | -AC-GT-AAG | -T-TA-ACAT  |      | C-GT-GAGAA  |

FIGURE 9G

|                  |      |            |             |            |             |            |      |
|------------------|------|------------|-------------|------------|-------------|------------|------|
| 3p.pile{hpea}    | 2801 | TGCTCAGCAG | GATAAGGGTA  | TTGCAATCCC | GCATGACATC  | GACCTCGGGG | 2850 |
| 3p.pile{hpeuigh} |      | TGCTCAGCAG | GATAAGGGTA  | TTGCAATCCC | GCATGACATC  | GACCTCGGGG |      |
| 3p.pile{hpesvp}  |      | TGCTCAGCAG | GATAAGGGTA  | TTGCAATCCC | GCATGACATT  | GACCTCGGAG |      |
| 3p.pile{hpenssp} |      | TGCTCAGCAG | GATAAGGGTG  | TTGCTATCCC | CCACGATATC  | GATCTTGGTG |      |
| 3p.pile{840453p} |      | TGCgCagCAA | gACAAGGGca  | TcacCaTTCC | ACACGACATA  | gATTTAGGTG |      |
| Consensus        |      | TGC-CAGCA- | GA-AAGGG--  | T--C-AT-CC | -CA-GA-AT-  | GA--T-GG-G |      |
| 3p.pile{hpea}    | 2851 | AATCCCGTGT | AGTTATTTCAG | GATTATGACA | ACCAACATGA  | GCAGGACCGA | 2900 |
| 3p.pile{hpeuigh} |      | AATCTCGAGT | TGTTATTTCAG | GATTATGACA | ACCAACATGA  | GCAGGACCGG |      |
| 3p.pile{hpesvp}  |      | AATCTCGTGT | GGTTATTTCAG | GATTATGATA | ACCAACATGA  | ACAAGATCGG |      |
| 3p.pile{hpenssp} |      | ATTCCGGTGT | GGTCATTTCAG | GATTATGACA | ACCAGCATGA  | GCAGGATCGG |      |
| 3p.pile{840453p} |      | ACTCCCGTGT | GGTTATCCAG  | gattATgATa | ACcagcacga  | adaAgaTcgA |      |
| Consensus        |      | A-TC-CG-GT | -GT-AT-CAG  | GATTATGA-A | ACCA-CA-GA- | -CA-GA-CG- |      |

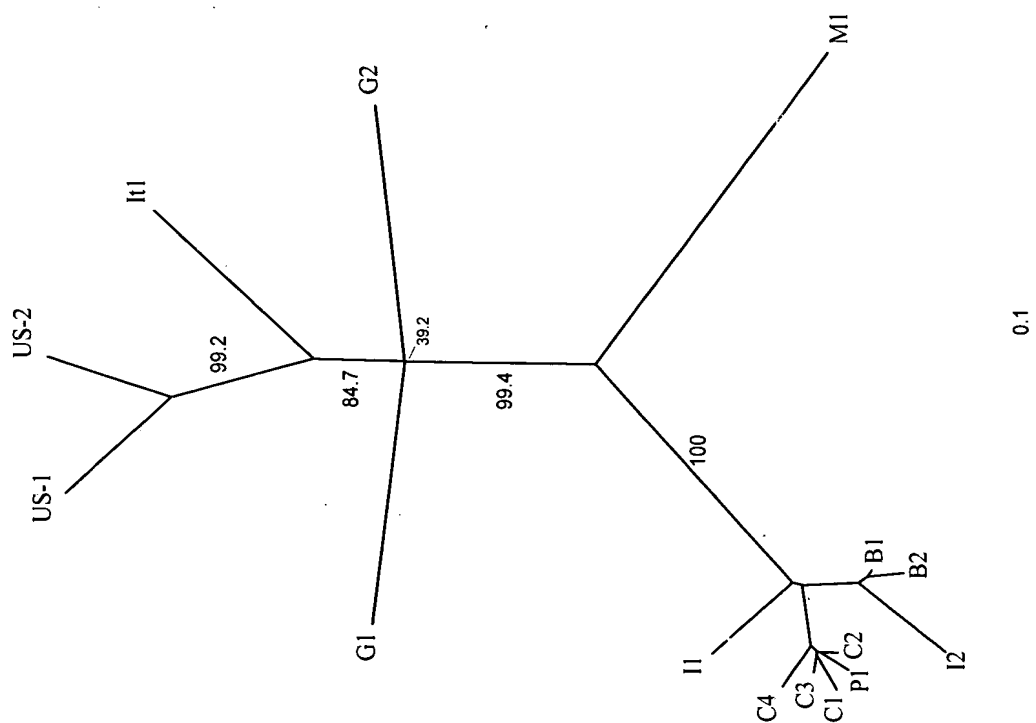


Figure 10



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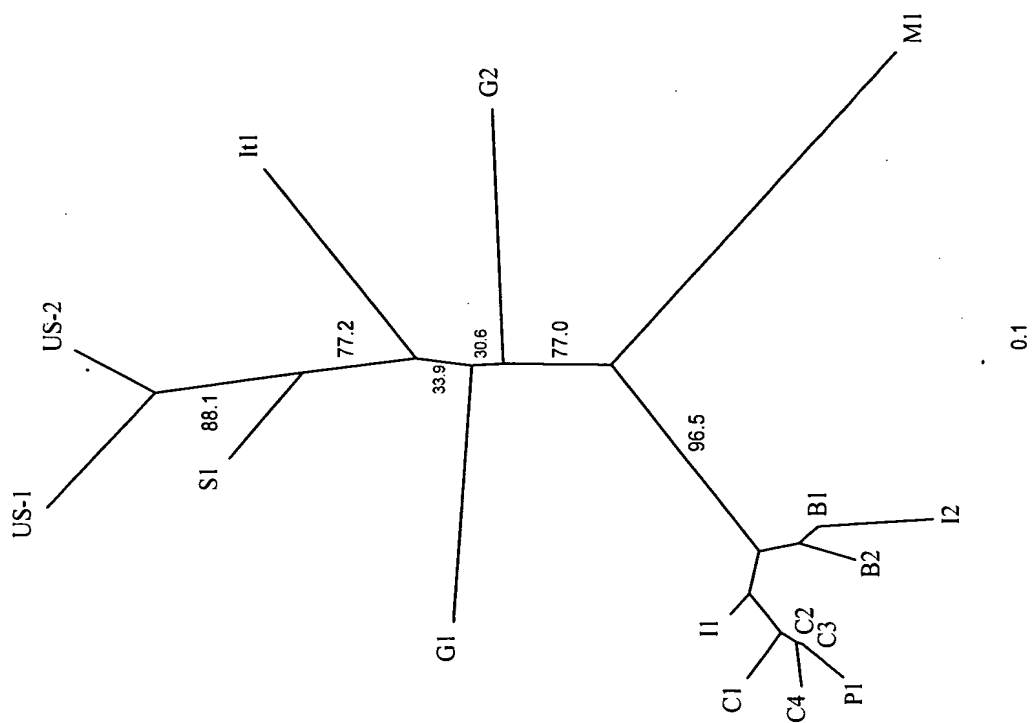


Figure 11

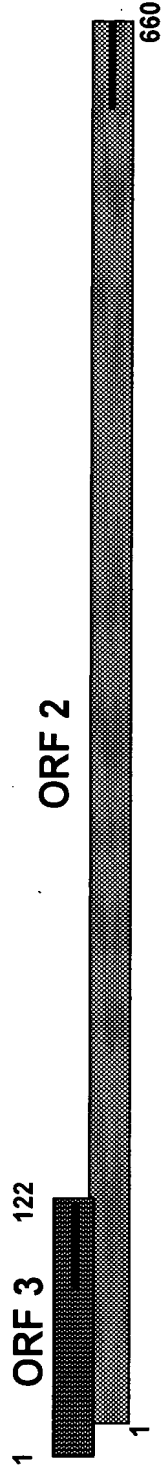


Figure 12A

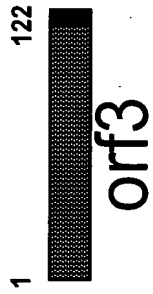


Figure 12B

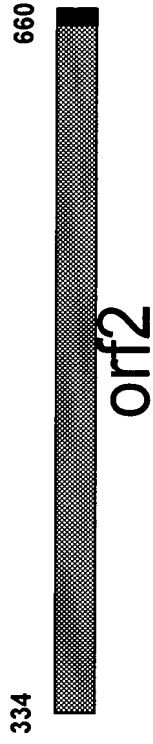


Figure 12C

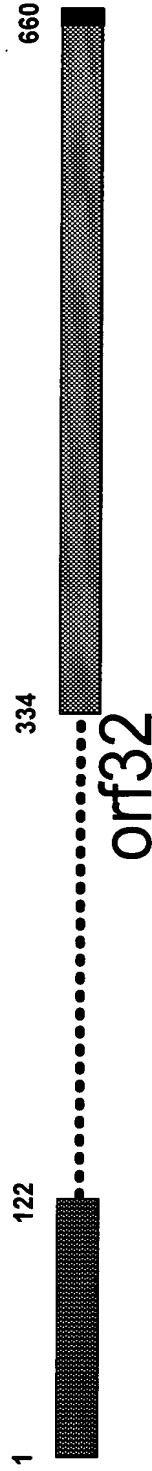


Figure 12D

MACAQUE 13906

HEV US-2 ORF 3 CKS - 29

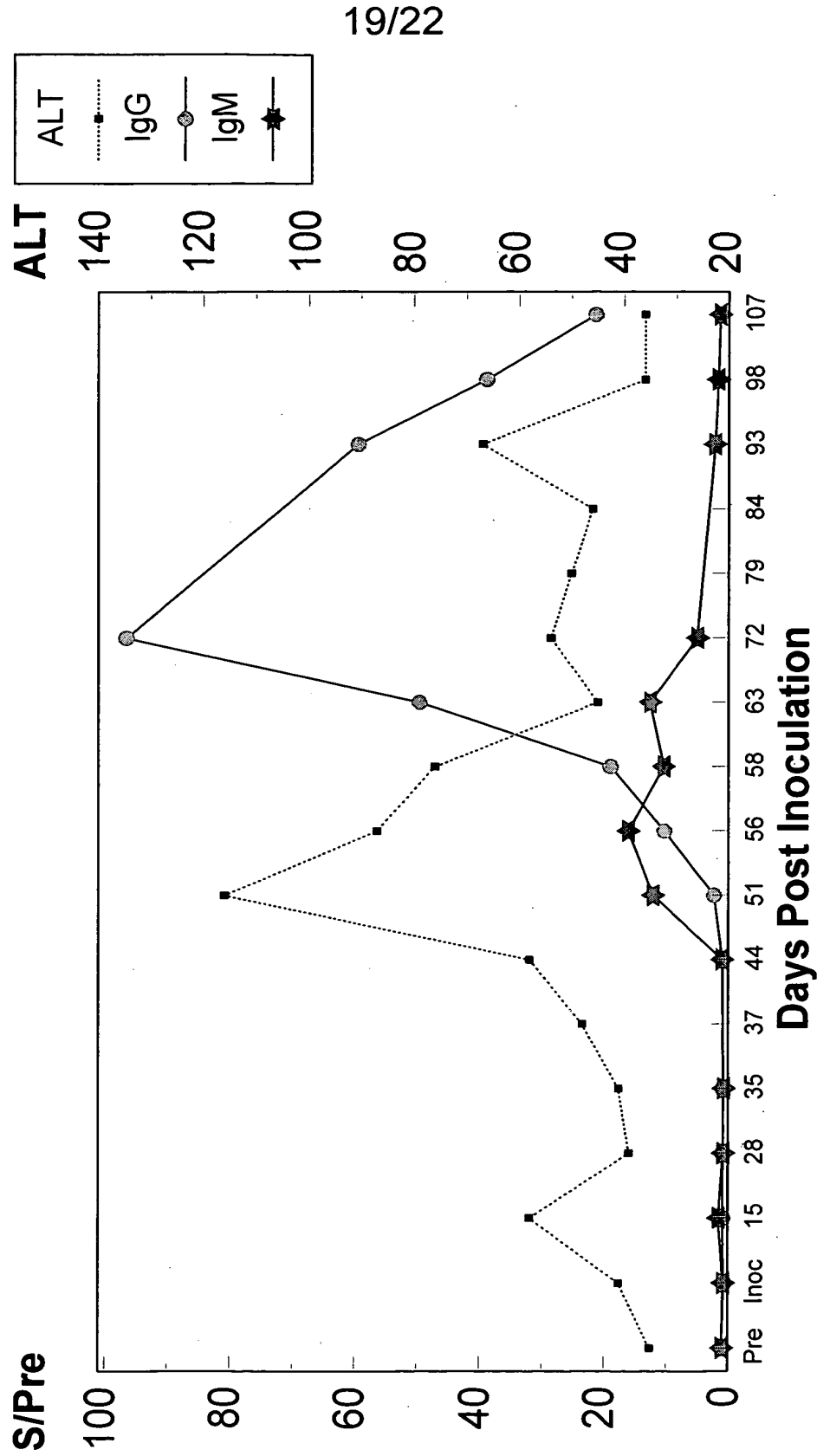


Figure 13

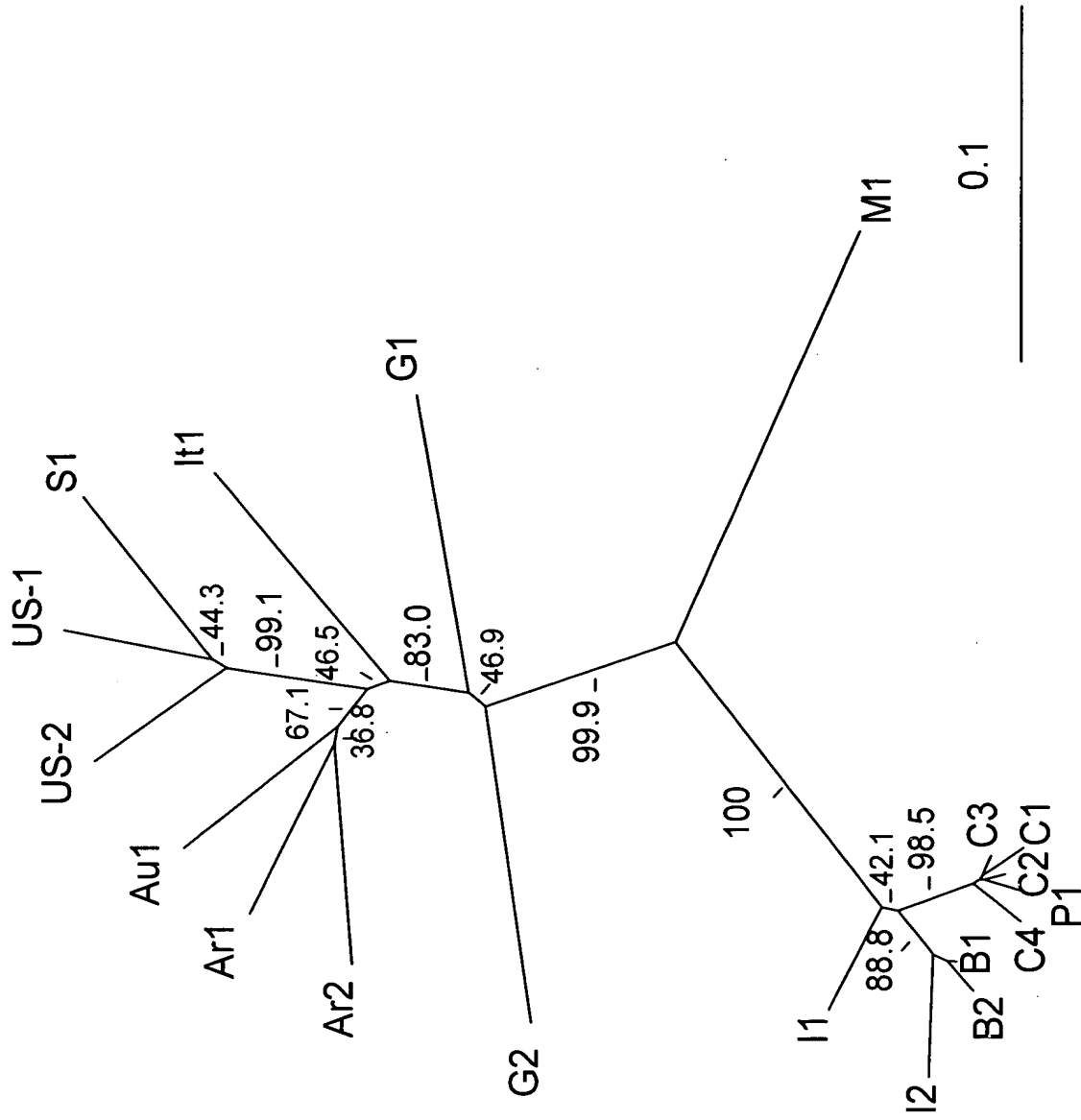


Figure 14

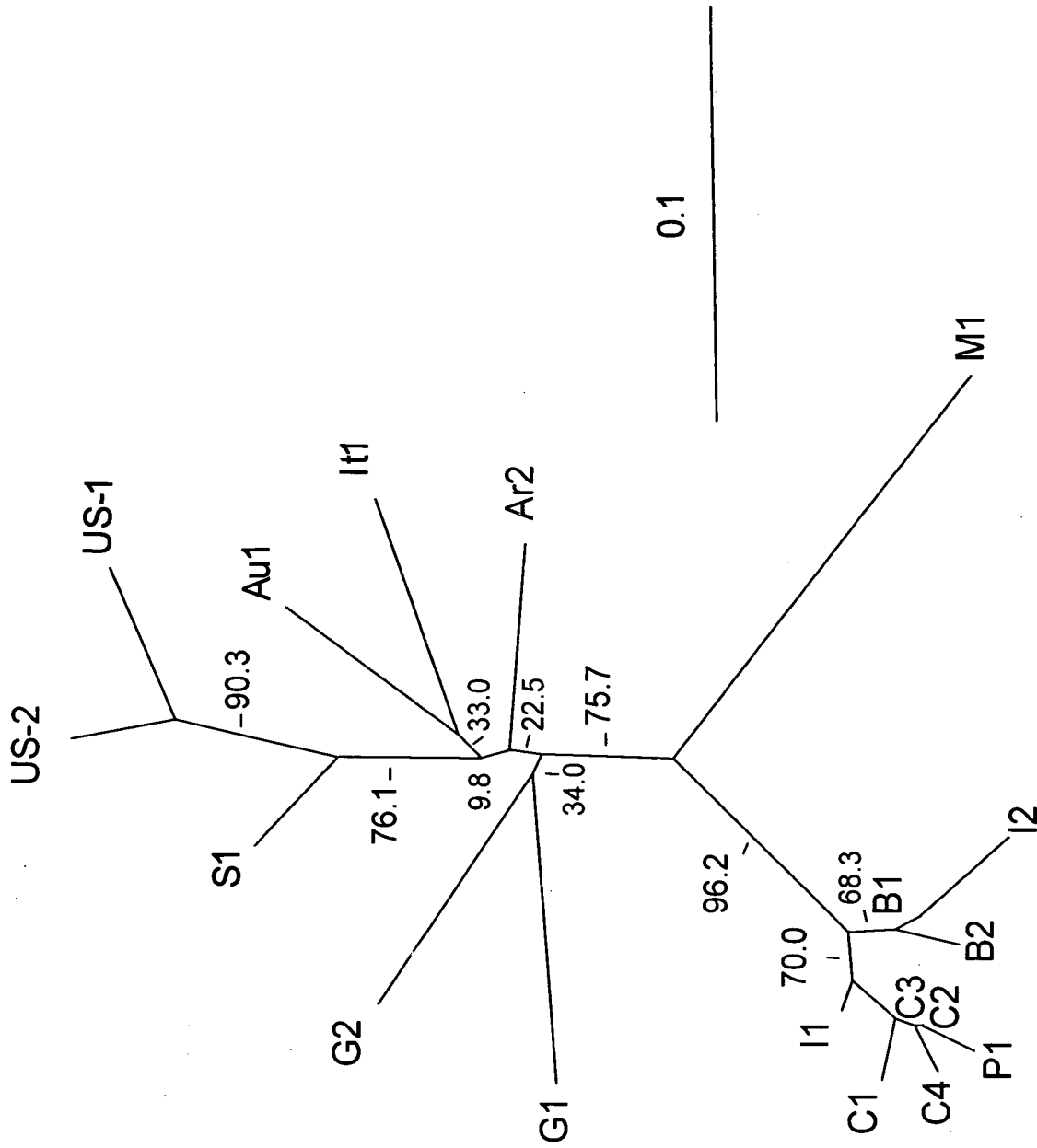


Figure 15

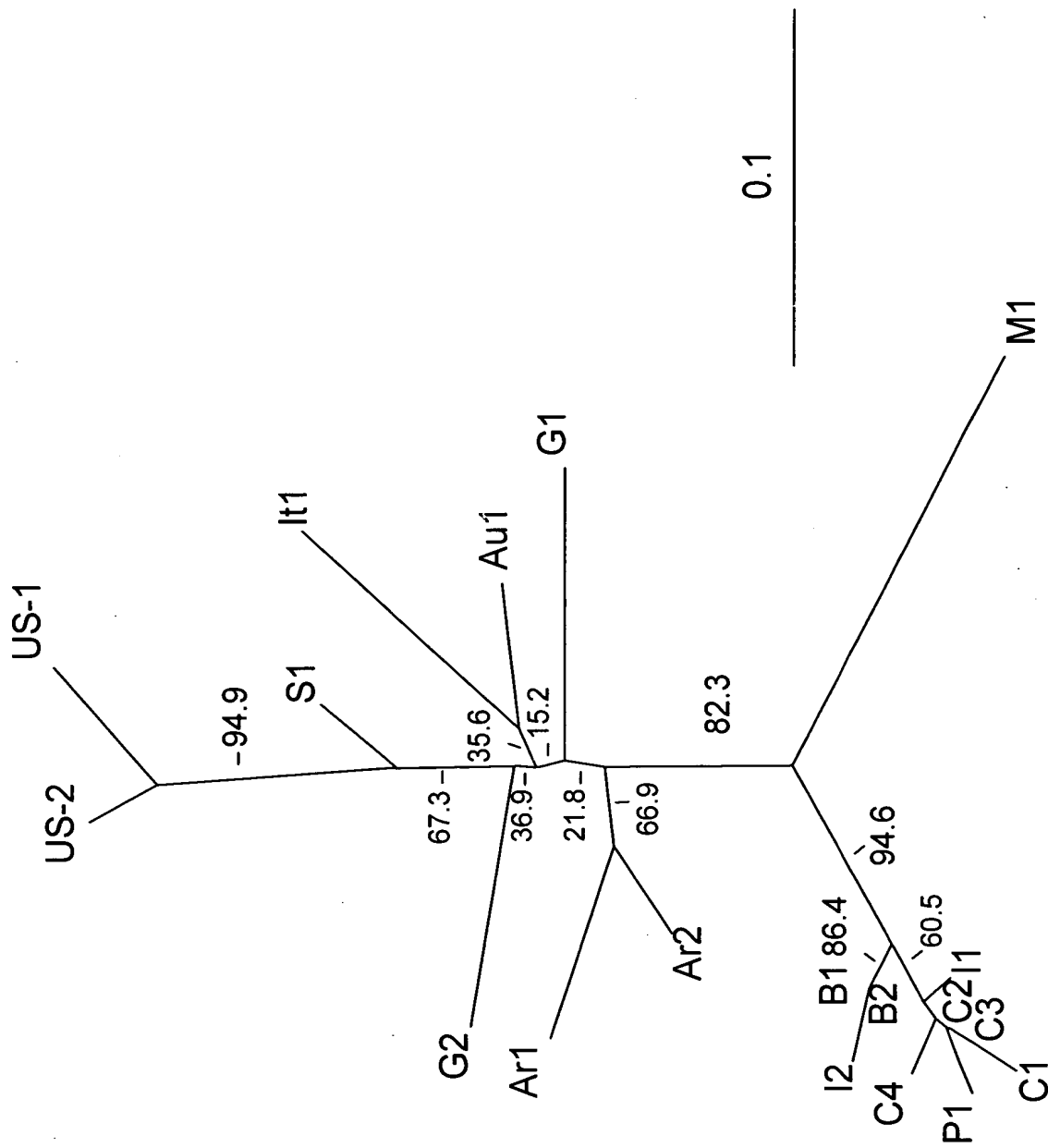


Figure 16